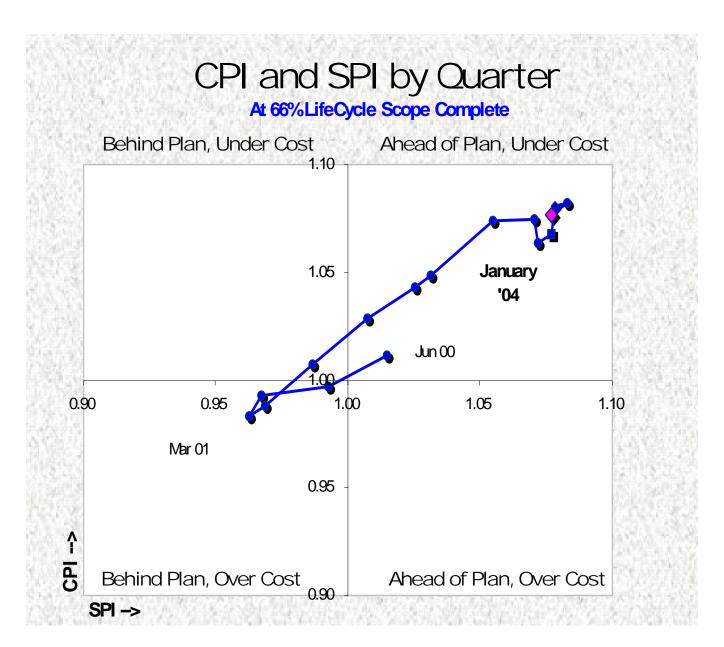
# ROCKY FLATS Monthly Project Report

FY04 January, 2004



January 2003

# **Executive Overview**

**In General**: The Closure Project is 66% complete against the contract baseline, and K-H continues to be below estimated cost and ahead of schedule. K-H continues its emphasis on working safely and maintaining compliance with procedures to ensure safe operations.

**Key Accomplishments:** D&D activities remain on or ahead of schedule. Work progressed in the nuclear buildings and on the south side of the Industrial Area with one reportable structure demolished during January. The Waste program shipped more than 240m³ of TRU, 11,400m³ of Low Level, and 2,000m³ of Low Level Mixed Waste. The contractor initiated characterization sampling for B779 Under Building Contamination (UBC), and completed UBC characterization sampling for B991. Preliminary results for B991 show no under building contamination.

METRIC						
Safety:	NTS Reports: 1	Events of "Significant Concern" or above: 3				
Bears Watching	Offsite Hospitalizations: 0 Lock-Out-Tag-Out: 0 Skin Contaminations: 1	Rad/Haz Transport Incidents: 0 Electrical Source / Overhead Line Contact: 3 Potential Uptakes: 0				
Cost Variance:	Cumulative Cost Variance = +7%, +\$187M out of ~\$2,623M BCWP <sub>CUM</sub>					
On Plan	LIFECYCLE: 66% of target scope completed; 61% of target cost expended.					
Schedule Variance:	<b>Predetermined Work Activities</b> $SV = +61\%$ , $+\$166M$ LIFECYCLE: 24% of scope scheduled; 38% of scope completed.					
On Plan	Traditional Schedule Variance = +8%, +\$188M LIFECYCLE: 61% of scope scheduled; 66% of scope completed.					
Critical Path	<b>CP</b> = <u>B371 D&amp;D</u> , <u>ER activities</u>	Estimated Completion Date: December 15, 2006				
Completion Date: On Plan	The critical path continues to involve B371 D&D and ER activities. RFPO is continuing to use the original Target Date, December 15, 2006, as the ECD. The lack of a LLMW receiver site for waste between 10 and 100 nanocuries/gram is rapidly approaching the					
Current CP: On Plan	critical path.					
	58% (48 months) of contract duration elapsed.					
Key Milestones  DNFSB: none remaining	Closure Activities: One reportable demolition was achieved in January. Minor demolitions included removal of 3 slabs and continued work on the 779 slab. Work continues on removal of three underground vaults and diesel tanks. The sites official heliport was removed with the associated parking lot. B-991 was readied for demolition, B-881 continues strip out and B-443 continues asbestos abatement.					
RFCA: 2004 complete	RFCA Milestones: All milestones scheduled for completion in FY 2004 are completed.					
GFS/I	GFS/I requirements are being met an	d/or are in process except as noted here:				
Status: On Plan	Need DOE receiver site for Low Level Mixed Waste Orphans (between 10 and 100					
Forecast: Bears Watching	nanocuries/gram).					

## Monthly Project Report Rocky Flats

January 2003

# **Executive Summary**

#### **Contract Status**

TC: 3.973B (Original: 3.963) TF: \$340.8M (Original: \$340M) TCD: 15 December 2006

#### **Penalty Assessment**

No Fee Penalties were issued this month. To date, four fee penalties have been issued under the terms of this contract with total penalties equaling \$510,000.

#### **Requests for Equitable Adjustments (REAs):**

There were no new REAs submitted in January 2004. The National Emergency REA (Part I) remains under HQ review. The balance of the pending REAs is under RFPO review or fact-finding. No REAs have been incorporated into the contract since July of 2002.

#### Pending (Submitted) REA's: ~ \$39M

- ~ \$16.4 million: National Emergency (2002 2003 Costs)
- ~ \$12.1 million: WIPP WAC Part III (projected 2002 2005 costs)
- ~ \$5.2 million: Disposition of Pu Components
- ~ \$2.7 million: PuSPS Moisture measurement
- ~ \$2.5+ million in these miscellaneous REAs: System Engineers/B371 VSS NTS Waste Acceptance Criteria PuSPS outside SRS Requirement Beryllium Monitoring



#### **Critical Path**

The remaining Critical Path continues to run through B371 D&D activities, followed by site grading. RFPO is monitoring the critical path and near critical path activities resulting from the contractor's accelerated schedule and for the time being will continue to utilize December 15, 2006 as the estimated completion date.



#### **GFS/I Performance**

Most requirements have been and continue to be met. The key remaining issue is the identification of disposal sites for LLMW between 10 and 100 nCi/g activity.

Two possible sites have been identified: Hanford, and the Nevada Test Site (NTS):

- Disposal at Hanford depends upon a Record of Decision that has been delayed until March 2004.
- Disposal at NTS depends upon permit approval from the State of Nevada with no specific timeframe.

Without disposal capability, these "orphans" may need to be stored offsite at increased cost. Some may be returned to the site after treatment, only to face diminishing storage capacity as facilities are deactivated and demolished. Contingency planning for this issue has begun.



#### Safety

3 Events of "Significant Concern" or Above

1 Site Noncompliance Tracking Report

Offsite Hospitalizations: 1

Lock-Out-Tag-Out Violations: **0**Radiological Intakes: *None*.

Rad/Haz Transport Incidents: None.

Energized Source or Overhead Line Events: 3

Skin Contaminations: 1

**Hospitalizations**: Electrician stepped into a conduit chase hole in the floor (B883) injuring his leg and wrist Off-site hospital released him with prescription medication. **Skin Cons**: 854dpm/100cm<sup>2</sup> detected on right elbow and 427dpm on left elbow of a B371 D&D worker. **Energized Source/Overhead line**: Two incidents involved fork-lift masts snagging on overhead telecommunications lines. One incident involved an inadequate zero-voltage verification check resulting in a 120-VAC electrical shock to a worker's right thumb while disassembling office partitions/desks in the T119B Facility.

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#### **Cost Performance**



#### Cost

LIFECYCLE: 66% of scope completed; 61% of target cost expended

Cost Variance +7%, +\$188M

The Cost Variance on the Project remains significantly positive, with about \$187 million in cost savings accumulated since the beginning of the contract. However, cost variance for contractual activities declined \$8.3M this month, falling from a positive 7.6% to a positive 7.1% variance against the baseline plan. Positive cost variances continue to be concentrated in PBD E, Industrial and Site Services Project and PBD G, the Environmental Remediation Project where accelerated D&D and IHSS remediation are resulting in significant cost savings. The majority of the negative variance is located in the 371, 707, and 771 Sub-projects.

In the 371 Project, an elevated degree of difficulty was experienced in the building's highly contaminated dismantlement sets (Canyons). \$3.5M in workscope took nearly \$7M to complete in January. Most of the Closure Project's negative cost variance is in this PBD, in historical costs associated with PUSPS and SNM packaging. However, an additional \$4.2M in negative CV has accrued since the completion of PuSPS (July, 2003). Activities in this PBD continue to dominate the critical path.

In the 707 Project, \$3.4M in workscope took more than \$6M to complete this month. In addition to a higher degree of difficulty in completing the later sets, the delay in transition of steelworkers from 776 to 707 resulted in overtime costs to maintain the contractor's accelerated schedule.

In the 771 Project, \$779k of workscope took \$2.3M to complete. In this case, the fixed price contract for D&D of the Facility is \$9.5M more than the baseline estimate under the contract. Increasing negative CV is anticipated.

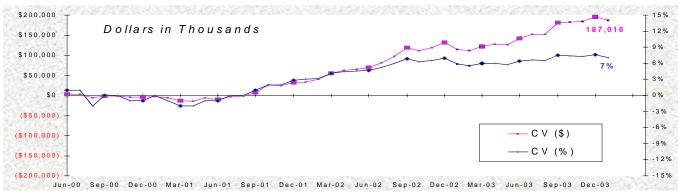
In PBD F this month, although cost variance remained positive, \$9.4 in workscope took \$13M to complete due to higher than estimated waste disposal costs.

#### **Cost Performance by PBD\*:**

	ect Description	BCWP	ACWP	CV (\$)	CV (%)
1A	371 Complex Project	318,348	368,316	(49,969)	-16%
1B	707 Complex Project	190,166	201,749	(11,583)	-6%
1C	B771/774 Closure Project	220,325	222,174	(1,849)	-1%
1D	B776/777 Closure Project	192,537	182,423	10,114	5%
1E	Industrial and Site Services Project	507,641	393,364	114,277	23%
1F	Material Stewardship Project	581,052	579,364	1,687	0%
1G	Remediation Project	120,650	58,504	62,146	52%
1H	Engr., Environ, Safety & Quality	166,404	147,048	19,356	12%
1J	Support Project	326,245	283,410	42,836	13%
ı	Project Totals	2,623,368	2,436,352	187,016	7.1%

Includes all target fund sources: EY06, FS30, EW09, GG08, NN61 and YN01 (EW05 was recast to EY06 and FS 40 recast to FS30 beginning in FY04)

#### **Cumulative Cost Variance Over Time**



**NOTE:** Currently, the closure project has accumulated \$28.9M in non-target Site Closure (EY06) and Safeguards and Security (FS30) costs. These non-target costs are generally the result of technical direction and may eventually be considered as part of potential Requests for Equitable Adjustment, and / or will impact cost variance.

### Monthly Project Report Rocky Flats

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#### **Schedule Performance**

DEFINITIONS OF ROCKY FLATS' SCHEDULE PERFORMANCE INDICATORS CAN BE FOUND IN THE GLOSSARY AT THE BACK OF THIS REPORT.



#### **Comparative Schedule Performance**

The project-level positive schedule variances reflect the contractor's continued success at accelerating workscope. The majority of accelerated activities have been in the demolition of facilities in the industrial area (PBD E), IHSS remediations in PBD G, and in waste shipping in PBD F – not on the critical path. The current critical path remains dominated by activities in Building 371 (PBD A) followed by site grading (PBD G).

Schedule variance metrics are positive for all but the B771/774 project which experienced a drop this month. The project is having difficulty achieving free release levels by hydrolazing the floors in 6 areas (four areas in 774 and two in 771). Hot spots may have to be cut out for disposal.

Project		SV <sub>TRAD</sub>	SV <sub>PWA</sub> *	SV <sub>MM</sub>	SV <sub>P3</sub> +/- Days**
1A	371 Complex Project	2%	8%	5%	207
1B	707 Complex Project	6%	21%	14%	190
1C	B771/774 Closure Project	3%	-4%	3%	-105
1D	B776/777 Closure Project	13%	31%	27%	307
1E	Industrial and Site Services Project	22%	904%	69%	246
1F	Material Stewardship Project	4%	117%	15%	239
1G	Environmental Remediation	28%	497%	30%	224
_	Total	Project: 8%	61%	23%	224

<sup>\*</sup>These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report

\*\*KH's Accelerated Working Plan



#### **P3** Completion

The K-H generated Estimated Completion Dates (using P<sup>3</sup> project scheduling software), are represented below.

The critical path continues to run through B371 D&D and site grading activities. RFPO is monitoring and will continue using the original Target Date, December 15, 2006 as the estimated completion date.

PBD	<b>Activity Description</b>	Baseline Early Finish	Statused Early Finish
Α	B371	11-Oct-06	11-Nov-05
В	B707	13-Mar-06	10-Jun-05
С	B771/774	18-Aug-04	19-Jan-05
D	B776/777	31-Oct-06	12-Aug-05
Е	Industrial Sites	11-Oct-06	13-Sep-05
F	Material Stew.	13-Dec-06	28-Nov-05
G	ER	14-Dec-06	21-Dec-05
	Total Project	t 14-Dec-06	21-Dec-05

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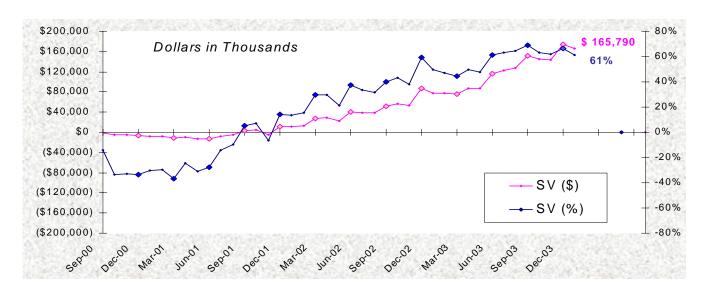


#### **Predetermined Work Activities**

 $SV_{PWA}$  (+\$166M, +61%)\*

About \$8M in critical closure scope was scheduled during the month of January, while about \$14M was completed. The current PWA schedule variance remains highly positive, and shows that the contractor has completed 61% more critical closure work than their baseline estimate. The current BCWS for these activities is \$270M with a lifecycle BCWS of \$1.145B. At the end of January 2004, 58% of the contract schedule had elapsed (48 out of 82.5 months), 24% of the PWA scope was scheduled for completion, and 38% (\$435M) of the PWA scope is complete.

\*These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report



#### PWA Schedule: Actual against Baseline Projection



January 2003

# **Project Metrics**

Project Metric	Contract Lifecycle Planned	Actuals to Date	LC Completion	CPB Planned to end of FY	FY Completion	Actuals for Month	FY Actuals	FY Plan (AWA)
Low Level Waste Disposed (m <sup>3</sup> )	184,475	131,010	71%	116,662	112%	11,461	31,409	54,000
Low Level Mixed Waste Disposed (m <sup>3</sup> )	44,614	31,523	71%	10,911	289%	2,044	5,148	3,500
TRU Waste Disposed (m <sup>3</sup> )	12,355	9,354	76%	9,688	97%	241	1,140	4,600
B371 Project Work Sets	60	25	42%	33	76%	0	3	26
B707 Project Work Sets	98	69	70%	72	96%	1	1	16
B771 Project Work Sets	106	76	72%	106	72%	0	5	35
B776 Project Work Sets	82	77	94%	72	107%	0	0	8
<b>Facilities Demolished</b>	290	150	52%	141	106%	1	19	61
<b>Nuclear Facilities Decommissioned</b>	6	1	17%	2	50%	0	0	
Radioactive Facilities Decommissioned	54	19	35%	14	136%	0	4	
<b>Industrial Facilities Decommissioned</b>	317	217	68%	197	110%	1	15	
<b>Environmental PWAs Completed</b>	65	25	38%	19	132%	0	2	8
<b>Environmental Remediation Sites Completed</b>	360	207	58%	182	114%	0	16	24
Gloveboxes removed	1,324	1,143	86%			7	52	277

## **Key Definitions / Terms**

#### **Rocky Flats' schedule performance indicators:**

All indicators (except P3) use the standard formula SV=BCWP-BCWS and are measured in dollars, not time. Performance is measured against the Life-Cycle Baseline as presented in June 2000 with minimal adjustments approved through our rigorous Change Control Process. The indicators defined below differ mainly in which budgeted costs are included in the analysis.

**Traditional Schedule Variance (SV**<sub>TRAD</sub>): This indicator addresses schedule performance compared to plan for the entire project contracted with Kaiser-Hill. It includes all "Target" costs as defined by the contract (EW05, EW09 (formerly EW02), FS40, GG08, YN01, and NN61). It does NOT include budgeted costs for things like performance fee, technology deployment, and program (RFFO) funds. A positive variance means that, compared to the original plan, more work was accomplished than planned. A negative variance means that less work has been accomplished than planned.

Modified Milestone Schedule Variance ( $SV_{MM}$ ): This schedule performance indicator is designed to focus on all the 'real' work at the site. It removes level-of-effort activities from the analysis, but adds the Technology Deployment budget. Again, the variance indicates that more work or less work was accomplished than planned.

**Predetermined Work Activities Schedule Variance (SV**<sub>PWA</sub>): In order to best assure that the government is awarding performance fee for the accomplishment and acceleration of the most important work at Rocky Flats, our contract with Kaiser-Hill includes a list and schedule of ~900 "Predetermined Work Activities" against which performance is measured and provisional fee is paid. Generally,  $SV_{PWA}$  calculations allow for earning value only when an activity is 100% complete (all or none), unless the activity is a quantity-based measure. These activities represent critical work necessary to the timely closure of the Site, and performance is measured against the baseline schedule set out at the beginning of the contract. Although the contractor is free to realign specific work activities as they see fit, the dollar amount of work accomplished against these critical activities is expected to remain on plan to facilitate timely closure of the site.

Primavera Project Planner Schedule Variance ( $SV_{P3}$ ): In contrast with the previous indicators, the P3 schedule variance is measured in units of time (days). The Primavera project scheduling software computes the longest (critical) path through the contractual work on the Project and arrives at the Statused Early Finish, (a.k.a. Estimated Completion Date). Variance is measured against the Baseline Early Finish as established in June 2000.

**Orphans** – **Low Level Mixed Waste Orphans.** Wastes which must be removed from the Site but for which no disposal / treatment path has been identified and/or approved.

**D&D** – **Deactivation and Decommissioning.** Deactivation: the process of placing a "building" in a safe and stable condition. Decommissioning: All activities that occur after deactivation. Includes decontamination and dismantlement /demolition.

- **PBD A 371 Complex Project.** Remaining D&D. Building demolition by October 11, 2006.
- **PBD B 707 Complex Project.** Remaining D&D. Building demolition by March 1, 2006.
- **PBD** C 771 Complex Project. Remaining D&D. Building demolition by August 4, 2004.
- **PBD D 776 Complex Project.** Remaining D&D. Building demolition by October 27, 2005. Removal of the slab/foundation by 4/26/06 and project completion by 10/31/06.
- **PBD E Industrial** / **Site Services Project**. The industrial and site services portion of the RISS Project, and other bldg D&D.
- **PBD F Material Stewardship Project.** Technical program direction and operational support for commodities, engineered services, procurement, traffic & transportation, and disposition of waste.
- **PBD** G Remediation Project. The Environmental Restoration (ER) Program is included in the RISS Project. The overall scope is to cleanup IHSSs, PACs, UBCs, and ground water plumes through accelerated actions under CERCLA and RFCA.
- **PBD H Engineering, Environmental, Safety, Quality, and Health**. Infrastructure. Includes; project management, assessment, oversight, regulatory compliance and monitoring, waste certification, technical training, Nuclear Safety and Licensing, Criticality Safety, Fire Protection, Engineering, Safety/Work Control, and Radiological Protection.
- **PBD J Support Project**. General Counsel & Audit (GC&A), Strategic Planning & Integration, Administration, and the K-H Executive Office.

Executive Office.